I CLAIM AS MY INVENTION:

1. A composite product comprising:

a fiber-reinforced material containing fibers exhibiting a preferred orientation, and having a coefficient of thermal expansion that is direction dependent and that depends on said preferred orientation of the fibers;

a further material, having a coefficient of thermal expansion, disposed relative to said fiber-reinforced material with a boundary therebetween and a boundary region at said boundary; and

a bond in said boundary region bonding said fiber-reinforced material and said further material, said fibers in said boundary region being aligned so that said coefficient of thermal expansion of said fiber-reinforced material and said coefficient of thermal expansion of said further material are substantially equal in said boundary region.

2. A composite product as claimed in claim 1 wherein said fiber-reinforced material has a heat conductivity with a magnitude that is direction dependent and that depends on said preferred orientation of said fibers, and wherein said fibers of said fiber-reinforced material outside of said boundary region are aligned in a direction to maximize said magnitude of said heat conductivity.

3. An anode for an x-ray tube, said anode comprising:

an anode plate composed of a fiber-reinforced material containing fibers exhibiting a preferred orientation, and having a coefficient of thermal expansion that is direction dependent and that depends on said preferred orientation of the fibers;

a focal path composed of a further material, having a coefficient of thermal expansion, disposed relative to said fiber-reinforced material with a boundary therebetween and a boundary region at said boundary; and

a bond in said boundary region bonding said fiber-reinforced material and said further material, said fibers in said boundary region being aligned so that said coefficient of thermal expansion of said fiber-reinforced material and said coefficient of thermal expansion of said further material are substantially equal in said boundary region.

4. An anode as claimed in claim 3 wherein said fiber-reinforced material has a heat conductivity with a magnitude that is direction dependent and that depends on said preferred orientation of said fibers, and wherein said fibers of said fiber-reinforced material outside of said boundary region are aligned in a direction to maximize said magnitude of said heat conductivity.

5. An anode as claimed in claim 3 wherein said fiber-reinforced material of said anode plate comprises carbon fiber-reinforced graphite.

6. An anode as claimed in claim 5 wherein said further material of said focal path is comprised of a refractory metal and is applied to said carbon fiber-reinforced graphite by a process involving application of heat.

7. An anode as claimed in claim 6 wherein said refractory material is selected from the group consisting of tungsten and tungsten-rhenium alloys.

8. An anode as claimed in claim 6 wherein said process is a coating process.

9. An anode as claimed in claim 8 wherein said coating process is vacuum-plasma spraying.

10. An anode as claimed in claim 6 wherein said process is a soldering process.